

IN THE CLAIMS:

Please AMEND claims 1, 10, 45, 48-50, 53 and 54 and ADD new claims 55-56 in accordance with the following:

1. (CURRENTLY AMENDED) A non-contacting conveyance equipment comprising:
a body having an end face that opposes an object to be conveyed, and at least one concave opening formed in the end face and surrounded by a cylindrical inner side wall; and
a fluid passageway having a plurality of spouts to introduce fluid into an inner space of the concave opening in a one circumferential direction of the cylindrical inner sidewall so as to cause a swirl of fluid within the concave opening, the plurality of spouts being formed on the cylindrical inner sidewall.

2-4. (CANCELLED)

5. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 1, further comprising a centering guide to maintain a position of the object to be conveyed such that the object opposes the end face.

6. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 5, wherein
the non-contacting conveyance equipment has an outer periphery, and
the centering guide comprises at least three centering protrusions provided around the outer periphery.

7. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 6, wherein

the centering protrusions are radially displaced from a center of the non-contacting conveyance equipment, and

the non-contacting conveyance equipment further comprises a centering mechanism to vary the radial distance of the centering protrusions from the center of the non-contacting conveyance equipment.

8. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 7, wherein the centering mechanism comprises:

a rotatable disk; and

arms linking each centering protrusion to the rotatable disk such that rotation of the rotatable disk changes the radial distance of the centering protrusions from the center of the non-contacting conveyance equipment.

9. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 8, wherein the centering mechanism is pneumatically driven.

10. (CURRENTLY AMENDED) A non-contacting conveyance equipment comprising:

a base; and

a plurality of fluid swirl formation objects which are provided at the base,

wherein each of the plurality of fluid swirl formation objects comprises:

a body having an end face that opposes an object to be conveyed, and a concave opening formed in the end face and surrounded by a cylindrical inner side wall, and

a fluid passageway having a plurality of spouts to introduce fluid into an inner space of the concave opening in a one circumferential direction of the cylindrical inner side wall

so as to cause a swirl of fluid within the concave opening, the plurality of spouts being formed on the cylindrical inner side wall.

11. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 10, wherein fluid swirls clockwise in at least one of the plurality of fluid swirl formation objects, and fluid swirls counter clockwise in at least one of the plurality of fluid swirl formation objects.

12. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 10, wherein the base is surrounded with a peripheral edge to block a flow of fluid from the base.

13. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 12, wherein the peripheral edge has a stepped shape.

14. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 10, further comprising at least one fluid discharge passage provided in the base to expel fluid supplied through the plurality of spouts of the plurality of fluid swirl formation objects.

15-27. (CANCELLED)

28. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 10, further comprising a centering guide to maintain a position of the object to be conveyed such that the object opposes the end face.

29. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 28, wherein
the non-contacting conveyance equipment has an outer periphery, and
the centering guide comprises at least three centering protrusions provided around the outer periphery.

30. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 29, wherein
the centering protrusions are radially displaced from a center of the non-contacting conveyance equipment, and
the non-contacting conveyance equipment further comprises a centering mechanism to vary the radial distance of the centering protrusions from the center of the non-contacting conveyance equipment.

31. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 30, wherein the centering mechanism comprises:
a rotatable disk; and
arms linking each centering protrusion to the rotatable disk such that rotation of the rotatable disk changes the radial distance of the centering protrusions from the center of the non-contacting conveyance equipment.

32. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 31, wherein the centering mechanism is pneumatically driven.

33-37. (CANCELLED)

38. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 1, wherein
the plurality of spouts are plural pairs of spouts, and
each of the plural pairs of spouts is formed on the cylindrical inner side wall symmetrically to a central axis of the concave opening.

39. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 1, wherein the end face comprises a chamfered edge.

40. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 1, wherein the concave opening is in a tapered shape.

41. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 10, wherein
the plurality of spouts are plural pairs of spouts, and
each of the plural pairs of spouts is formed on the cylindrical inner side wall symmetrically to a central axis of the concave opening.

42. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 10, wherein the end face comprises a chamfered edge.

43. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 10, wherein the concave opening is in a tapered shape.

44. (PREVIOUSLY PRESENTED) A non-contacting conveyance equipment according to claim 10, wherein the plurality of fluid swirl formation objects are provided at the

base in such a way that each of the plurality of fluid swirl formation objects extends from the base.

45. (CURRENTLY AMENDED) Non-contacting conveyance equipment comprising:
- a ~~hole-like~~hole-shaped concave opening having a continuous walled inner peripheral surface;
 - an end face that opposes an object to be conveyed, the end face being formed in the concave opening;
 - a fluid passageway comprising a spout facing the inside of the concave opening, to supply fluid to the inner peripheral surface of the concave opening so as to cause a swirl of fluid within the concave opening; and
 - a centering guide to maintain the object to be conveyed such that the object opposes the end face, wherein
 - the non-contacting conveyance equipment has an outer periphery,
 - the centering guide comprises at least three centering protrusions provided around the outer periphery,
 - the centering protrusions are radially displaced from a center of the non-contacting conveyance equipment, and
 - the non-contacting conveyance equipment further comprises a centering mechanism to vary the radial distance of the centering protrusions from the center of the non-contacting conveyance equipment.

46. (PREVIOUSLY PRESENTED) Non-contacting conveyance equipment according to claim 45, wherein the centering mechanism comprises:
- a rotatable disk; and
 - arms linking each centering protrusion to the rotatable disk such that rotation of the

rotatable disk changes the radial distance of the centering protrusions from the center of the non-contacting conveyance equipment.

47. (PREVIOUSLY PRESENTED) Non-contacting conveyance equipment according to claim 46, wherein the centering mechanism is pneumatically driven.

48. (CURRENTLY AMENDED) Non-contacting conveyance equipment comprising:
a ~~hole-like~~hole-shaped concave opening having a continuous walled inner peripheral surface;

an end face that opposes an object to be conveyed, the end face being formed in the concave opening;

a fluid passageway comprising a spout facing the inside of the concave opening, to supply fluid to the inner peripheral surface of the concave opening so as to cause a swirl of fluid within the concave opening; and

a base with a plurality of concave openings provided on the base, each concave opening having an end face formed therein and a fluid passageway comprising a spout facing the inside thereof,

wherein the base is surrounded with a peripheral edge to block a flow of fluid off the base and the peripheral edge has a stepped shape.

49. (CURRENTLY AMENDED) Non-contacting conveyance equipment comprising:
a ~~hole-like~~hole-shaped concave opening having a continuous walled inner peripheral surface;

an end face that opposes an object to be conveyed, the end face being formed in the concave opening;

a fluid passageway comprising a spout facing the inside of the concave opening, to supply fluid to the inner peripheral surface of the concave opening so as to cause a swirl of fluid

within the concave opening;

a base with a plurality of concave openings provided on the base, each concave opening having an end face formed therein and a fluid passageway comprising a spout facing the inside thereof; and

at least one fluid discharge passage provided in the base to eliminate fluid supplied through the spouts.

50. (CURRENTLY AMENDED) Non-contacting conveyance equipment comprising:
a hole-shaped concave opening having a continuous walled inner peripheral surface;
an end face that opposes an object to be conveyed, the end face being formed in the concave opening;

a fluid passageway comprising a spout facing the inside of the concave opening, the fluid passageway ending at an opening through the inner peripheral surface, to supply fluid to the inner peripheral surface of the concave opening so as to cause a swirl of fluid within the concave opening; and

a centering guide to maintain the object to be conveyed such that the object opposes the end face, wherein

the non-contacting conveyance equipment has an outer periphery,

the centering guide comprises at least three centering protrusions provided around the outer periphery,

the centering protrusions are radially displaced from a center of the non-contacting conveyance equipment, and

the non-contacting conveyance equipment further comprises a centering mechanism to vary the radial distance of the centering protrusions from the center of the non-contacting conveyance equipment.

51. (PREVIOUSLY PRESENTED) Non-contacting conveyance equipment according to claim 50, wherein the centering mechanism comprises:

a rotatable disk; and

arms linking each centering protrusion to the rotatable disk such that rotation of the rotatable disk changes the radial distance of the centering protrusions from the center of the non-contacting conveyance equipment.

52. (PREVIOUSLY PRESENTED) Non-contacting conveyance equipment according to claim 51, wherein the centering mechanism is pneumatically driven.

53. (CURRENTLY AMENDED) Non-contacting conveyance equipment comprising:
a hole-shaped concave opening having a continuous walled inner peripheral surface;
an end face that opposes an object to be conveyed, the end face being formed in the concave opening;

a fluid passageway comprising a spout facing the inside of the concave opening, the fluid passageway ending at an opening through the inner peripheral surface, to supply fluid to the inner peripheral surface of the concave opening so as to cause a swirl of fluid within the concave opening; and

a base with a plurality of concave openings are provided on the base, each concave opening having an end face formed therein and a fluid passageway comprising a spout facing the inside thereof,

wherein the base is surrounded with a peripheral edge to block a flow of fluid off the base and the peripheral edge has a stepped shape.

54. (CURRENTLY AMENDED) Non-contacting conveyance equipment comprising:
- a hole-shaped concave opening having a continuous walled inner peripheral surface;
 - an end face that opposes an object to be conveyed, the end face being formed in the concave opening;
 - a fluid passageway comprising a spout facing the inside of the concave opening, the fluid passageway ending at an opening through the inner peripheral surface, to supply fluid to the inner peripheral surface of the concave opening so as to cause a swirl of fluid within the concave opening;
 - a base with a plurality of concave openings are provided on the base, each concave opening having an end face formed therein and a fluid passageway comprising a spout facing the inside thereof; and
 - at least one fluid discharge passage provided in the base to eliminate fluid supplied through the spouts.

55. (NEW) A non-contacting conveyance equipment according to claim 1, further comprising:
- a fluid supply mouth; and
 - a fluid swivel formation object, comprising:
 - a concave space formed in the body, including a perimeter,
 - a peripheral wall to form a central hole therein and a swirl passage between the peripheral wall and the perimeter of the concave opening,
 - a fluid introduction mouth to face the perimeter, and
 - a fluid passage between the fluid introduction mouth and the fluid supply mouth.

56. (NEW) A non-contacting conveyance equipment according to claim 56, further comprising a plurality of the fluid passageways disposed at a circumference of the body, wherein the fluid swivel formation object is disposed at a center of the body.